Ripped from the ROUNDUP

Ripped straight from the pages of old Space News Roundups, here's what happened at JSC on this date:

1

9

ransmission of the long awaited close-up photographs of the planet Mars began July 15 from the Mariner 4.

The first historic photograph was made available to the public late that same day. It was taken 10,500 miles as the spacecraft began its picturetaking sweep across the planet Mars. An area 200 miles square north of the Mars equator was shown in this first view. Scientists described the photo as showing broad featureless desert with a few low hills bordering it.

9

0

ne of the new minerals found in samples returned from America's first lunar landing has

been named "Armalcolite" in honor of the Apollo 11 crew, Neil A. Armstrong, Edwin Aldrin, and Michael Collins.

Announcement of the name came nearly one year to the day the Apollo 11 lunar module landed in the moon's Sea of Tranquility on July 20, 1969. Armstrong and Aldrin collected and returned approximately 47 lbs. of lunar material from their historic flight.

s America's Apollo spacecraft linked with the Soviet Union's Soyuz, "Contact. Capture.

Docking is completed," were the words spoken by Commander Tom Stafford to Mission Control.

This act, described by many as the culminating point of the mission, was brought into reality by the May 1972 agreement between the United States and the Soviet Union to work together toward a common docking system for future generations.

Following docking, Commander Stafford and Donald K. Slayton were the first to enter the passageway between the Apollo and Soyuz. They remained in the Soyuz spacecraft about three hours, participating in such activities as an exchange of flags, signing of flight certificates and eating the first international meal in space.

President Ford congratulated each crewmember and asked them a number of questions. Leonid Brezhnev also radioed congratulations



JSC hosts NASA Exchange Conference



Attending the recent NASA Exchange Conference at JSC were, from left, front: Sherry Petersen (ARC), Deborah Renick (ARC), Bennie Jacks (MSFC), May Wales (MSFC), Tracy Lamm (MSFC), Sam Lenck (KSC), Dan Remington (JSC), Greg Hayes (JSC), Sylvia Bell (WFF), Linda Layton (WFF), Lynda Haines (ARC), Mary Stites (HQ); back: Louann Beu (DFRC), Jim Hattaway (KSC), Karl Schuler (JSC), Axel Roth (MSFC), Al Harding (HQ), Mark Bettijewski (GRC), Jon Roth (SCC), Ted Mecum (GSFC), and Roberta Ross (DFRC).

hey came to learn, for the first time in two years, and tour JSC. By the end of the three-day conference, they all had new ideas on how to serve employees across the agency better. What are they? NASA Exchanges - created by the Space Act, and chartered to manage health, welfare and morale activities across the agency.

About 23 Exchange managers from NASA Headquarters and most of NASA's 10 centers attended the JSChosted Agency Exchange Conference June 20-22 at the Gilruth Center. Attendees presented overviews of their activities over the past two years, discussed their financial performance, and shared ideas and lessons learned.

"I think it's great that all of the centers are getting together to share ideas on how to serve employees," said JSC Deputy Director Bill Parsons in his welcoming remarks. "In all your efforts, as you plan

what you do at your centers, don't forget about employee safety.

"We want employees to do after-hours activities safely, go home and be safe there, and return to work the next day."

NASA Exchanges are responsible for operating retail stores at NASA facilities, managing employee activities associations or clubs, sport leagues, and many provide food services ranging from vending to cafeteria operations. Although they are federal instrumentalities, NASA Exchanges do not receive appropriated funds and thus do not receive any direct funding from Congress. They act as nonprofit businesses, surviving on the revenue they produce. Any income is used to pay for current and new products, services and facilities.

"The '90s have been challenging for NASA Exchanges, including ours," said Karl Schuler, manager, NASA Exchange – JSC Operations. "The business

environment is dynamic and Exchanges must adjust. This conference is an important tool because it allows attendees to share ideas about products and services that have worked well at their centers and that may work well in other markets."

Attendees appreciated the opportunity to learn about what Exchanges are doing. "I want to express my appreciation to all of you for taking time out of busy schedules to share lessons learned, and best practices," Allan Harding, NASA director, Contractor Industrial Relations, told those in attendance. "Special thanks go to the Johnson Space Center for hosting this event, and in particular to Greg Hayes, Karl Schuler and Mary O'Connell."

The attendees concluded their visit to JSC with a tour of the center including the X-38, Bldg. 9 and Mission Control.

The last NASA Exchange Conference was held in 1998 at the KSC. The next conference is targeted for 2002.

Continued from Page 1

ZVEZDA

Russian Mission Control Center in Korolev, Russia, planned to use the time to assure the module's systems were working properly, including navigation systems, thrusters and commanding and to fine-tune Zvezda's orbit in preparation for docking. All the while, Zvezda was closing in on Unity and Zarya – ISS modules already in flight – and was to become the passive vehicle on docking day as the Zarya performed the final rendezvous via remote control July 25 at an altitude of about 245 statute miles (394 kilometers).

Once attached, the 43-foot-long Zvezda will provide the life support system, electrical power system, data processing system, flight control system and propulsion for the orbiting station. Upon arrival of the first ISS crew – U.S. Astronaut Bill Shepherd and Russian Cosmonauts Sergei Krikalev and Yuri Gidzenko – Zvezda will fulfill its primary and most glamorous role as home to the early station residents.

"We are all now working together to ensure a successful docking on July 26 and integration of the ISS computer systems a few days later," added Mark Ferring, NASA ISS flight director.



The Zvezda Service Module, on board a Russian Proton Rocket, is shipped to Kazakhstan's Baikonur Cosmodrome.

"You could feel the momentum shift as soon as the third stage Proton engines cut off. The time has come to push ahead with ISS assembly, and the Houston flight control team is ready."

Zvezda's four ports also enable the module to function as the main docking vehicle for Russian Progress re-supply vehicles throughout the life of the space station. In fact, August 8, only three weeks after the Service Module's launch, the first Progress M1 cargo vehicle will dock to the aft-most port on Zvezda.

And so begins a continuous stream of missions to the orbiting outpost that will

result in rapid expansion of the largest engineering project in history. In the following months, two NASA shuttles will visit the station, preparing it for its first occupants. In September, Atlantis and the STS-106 crew will deliver supplies and equipment to the newly

expanded station. Later that month, the crew of STS-92 will install more station hardware and instrumentation, including the first small piece of the truss structure, its four gyroscopes and a conical docking adapter.

The Expedition One crew, including the first American to reside in space since Andy Thomas' visit to Mir in 1998, will embark for their four-month stay via a Russian Soyuz spacecraft in November.

"The baton has been handed back to NASA," said Goldin. "and we have a lot of things to do. We're going to live up to it. This is an international program and it's everyone that makes it great the Europeans, the Japanese, the Canadians and the Americans and the Russians."